Operating Instructions

STEREO DOUBLE CASSETTE DECK RECEIVER

RX-Z15/RX-Z35
RX-Z45

STEREO TURNTABLE

PL-Z85

SPEAKER SYSTEM

S-Z35D

* The RX-Z35, RX-Z45, PL-Z85 and S-Z35D are not sold in the U.S.A. and Canada.
  The RX-Z15 and RX-Z35 are not sold in Europe.

Thank you for buying this PIONEER product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.
In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However, the method of connecting and operating the unit is the same.

IMPORTANT NOTICE
[For U.S. and Canadian models]

The serial number for this equipment is located on the rear panel. Please write this serial number on your enclosed warranty card and keep it in a secure area. This is for your security.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

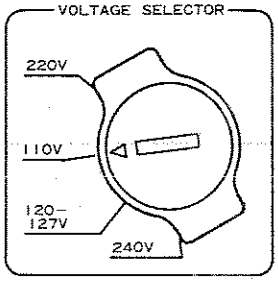
LINE VOLTAGE SELECTOR SWITCH

Only multi voltage models are provided with this switch. U.S., Canadian, European, U.K., and Australian models are not provided with this switch.

Mains voltages in Saudi Arabia are 127 V and 220 V only. Never use this model with 110 V setting in Saudi Arabia.

Before your model is shipped from the factory, this switch is set to the power requirements of the destination; nevertheless, you should check that it is set properly before plugging the power cord into the AC outlet.

1. Disconnect the power cord.
2. Use a medium-size screwdriver.
3. Insert the screwdriver into the groove on the voltage selector and adjust so that the voltage value of your area.



FM/AM CHANNEL STEP SWITCH

Adjustment is only necessary when there is a CHANNEL STEP switch at the rear panel.
The CHANNEL STEP switch is located on the rear panel of the digital synthesizer tuner. Before the tuner leaves the factory, this switch is set to the channel step standard of the area where the tuner is sold. Depending on the position of this switch, each time TUNING button is pressed, the frequency display changes by the following amount:

[100 kHz/10 kHz] position
For areas with channel step of 100 kHz for FM and 10 kHz for AM.

[50 kHz/9 kHz] position
For areas with channel step of 50 kHz for FM and 9 kHz for AM.

NOTE:
If the switch is set to the wrong position, correct tuning may not be possible.

Consult your dealer if you are not sure about the radio channel step standard in your area.

PIONEER®
The Art of Entertainment

IMPORTANT

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

SAFETY INSTRUCTIONS

READ INSTRUCTIONS — All the safety and operating instructions should be read before the appliance is operated.

RETAIN INSTRUCTIONS — The safety and operating instructions should be retained for future reference.

HEED WARNING — All warnings on the appliance and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS — All operating and use instructions should be followed.

WATER AND MOISTURE — The appliance should not be used near water — for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

LOCATION — The appliance should be installed in a stable location.

WALL OR CEILING MOUNTING — The appliance should not be mounted to a wall or ceiling.

VENTILATION — The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

HEAT — The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

POWER SOURCES — The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

POWER-CORD PROTECTION — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

POLARIZATION — If your purchased product is provided with a polarized power plug, please read the following instructions. This product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

CLEANING — The appliance should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzine, insecticides or other volatile liquids since they may corrode the cabinet.

POWER LINES — An outdoor antenna should be located away from power lines.

NONUSE PERIODS — The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

OBJECT AND LIQUID ENTRY — Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

DAMAGE REQUIRING SERVICE — The appliance should be serviced by a Pioneer authorized service center or qualified service personnel when:

- The power-supply cord or the plug has been damaged.
- Objects have fallen, or liquid has been spilled into the appliance.
- The appliance has been exposed to rain.
- The appliance does not appear to operate normally or exhibits a marked change in performance.
- The appliance has been dropped or the enclosure damaged.

SERVICING — The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

OUTDOOR ANTENNA GROUNDING — If an outside antenna is connected to the antenna terminal, be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges.
In the U.S.A. section 810 of the National Electrical Code, ANSI/NFPA 70, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Fig. A.

CART — An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

NEC — NATIONAL ELECTRIC CODE

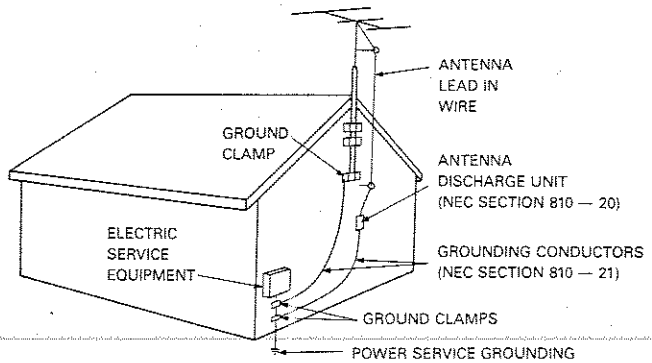


FIG. A

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Dear Customer:

Selecting fine audio equipment such as the unit you've just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. This manufacturer and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion—and, most importantly, without affecting your sensitive hearing.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

To establish a safe level:

- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

Once you have established a comfortable sound level:

- Set the dial and leave it there.

Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

We Want You Listening For A Lifetime

Used wisely, your new sound equipment will provide a lifetime of fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, this manufacturer and the Electronic Industries Association's Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise. This list of sound levels is included for your protection.

Decible Level	Example
30	Quiet library, soft whispers
40	Living room, refrigerator, bedroom away from traffic
50	Light traffic, normal conversation, quiet office
60	Air conditioner at 20 feet, sewing machine
70	Vacuum cleaner, hair dryer, noisy restaurant
80	Average city traffic, garbage disposals, alarm clock at two feet.

THE FOLLOWING NOISES CAN BE DANGEROUS UNDER CONSTANT EXPOSURE

90	Subway, motorcycle, truck traffic, lawn mower
100	Garbage truck, chain saw, pneumatic drill
120	Rock band concert in front of speakers, thunderclap
140	Gunshot blast, jet plane
180	Rocket launching pad

Information courtesy of the Deafness Research Foundation.

CAUTIONS REGARDING HANDLING

LOCATION

Install the unit in a well-ventilated location where it will not be exposed to high temperature or humidity.
Do not install the unit in a location which is exposed to direct sunlight, or near to hot appliances or radiators. Excessive heat can adversely affect the cabinet and internal components. Installation of the unit in a damp or dusty environment may result in malfunction or accident. (Also avoid installation near cookers etc., where the unit may be exposed to smoke from oil, steam or heat.)

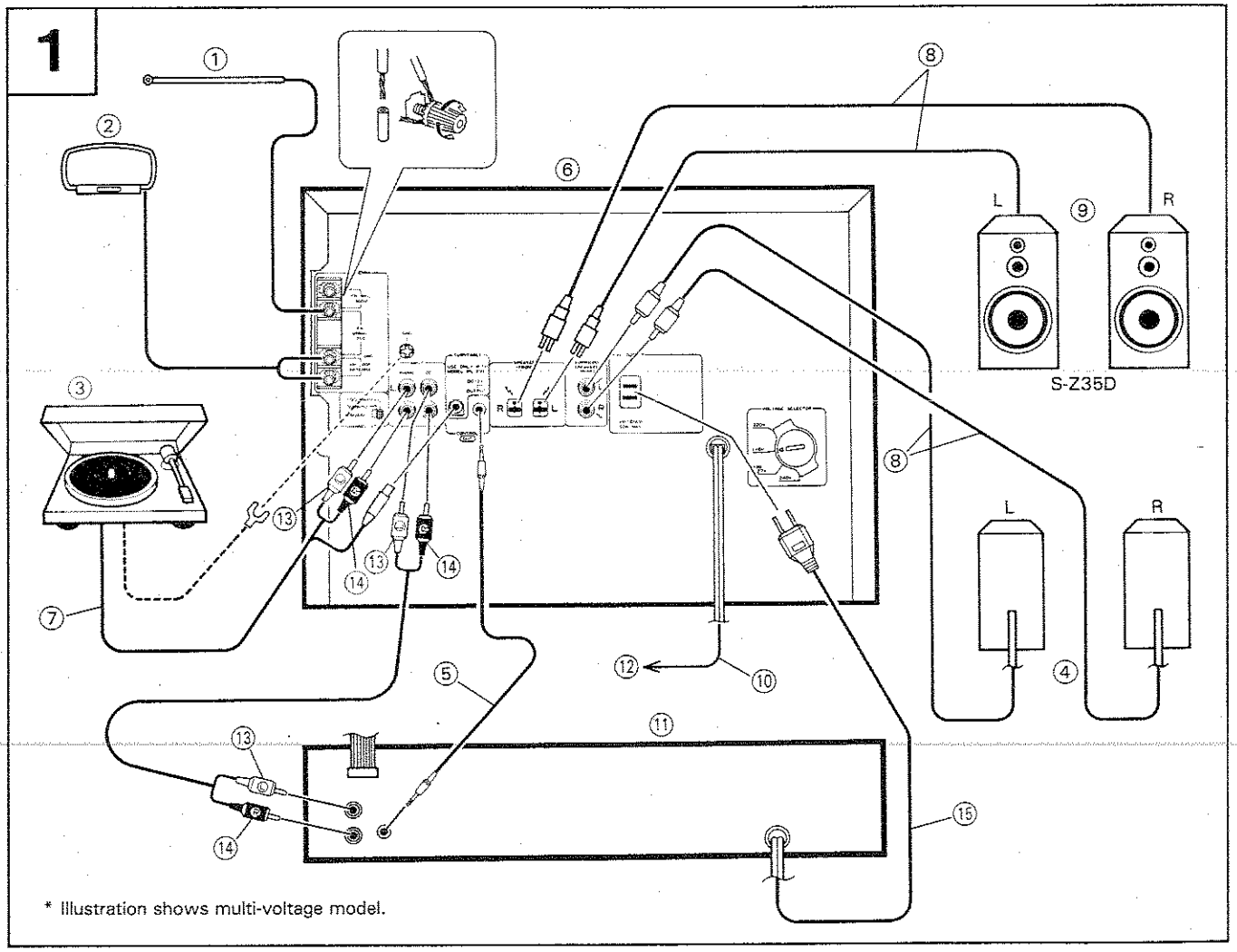
CAUTION CONCERNING TURNTABLE INSTALLATION

If the turntable is placed directly on or very close to a speaker, the vibrations from the speaker may be transported to the tonearm's cartridge, thus causing feedback howling. Be sure that speakers are placed sufficiently away from the turntable.

CONDENSATION

When the unit is brought into a warm room from previously cold conditions or when the room temperature is suddenly increased, condensation may form inside and the unit may not be able to attain its full performance. In cases like this, allow the unit to stand for about an hour or raise the room temperature gradually.

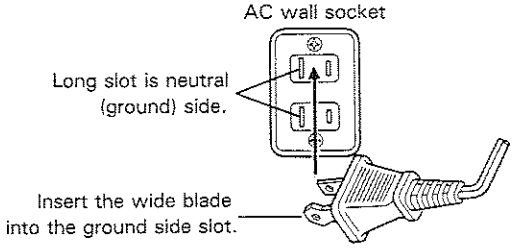
CONNECTIONS

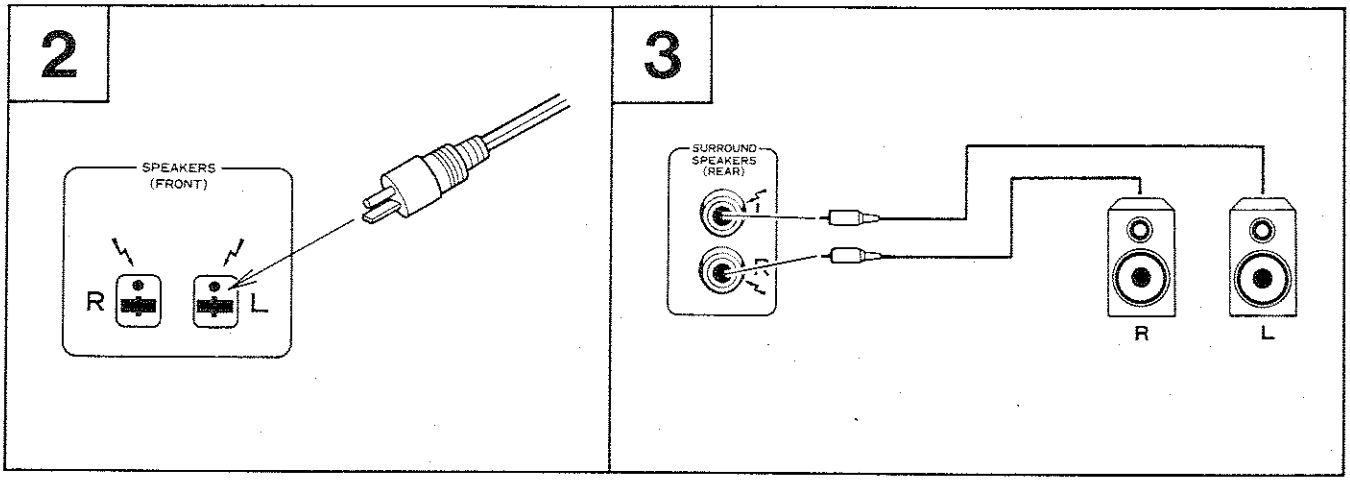


* Illustration shows multi-voltage model.

CONNECTING THE POWER CORD (For U.S. and Canadian models)

Household electrical outlets are provided with specific polarity, a live side and a neutral (ground) side. This unit utilizes such polarity in order to improve sound quality. As shown in the illustration, be sure to insert the power plug so that its blades match the width of slots in the outlet.





Refer to page 4 for the connections Fig. [1].

① Accessory FM antenna
② Accessory AM loop antenna
③ Turntable (PL-Z85, etc.)
④ Surround speaker system S-P70 (sold separately)
⑤ CD player control cord
⑥ Cassette deck receiver
⑦ Turntable connection cords
⑧ Speakers cord
⑨ Speaker system S-Z35D
⑩ Power cord
⑪ CD player (Separately sold PD-Z65, PD-Z75T, PD-Z74T or PD-Z85M)
⑫ To the AC wall socket
⑬ White
⑭ Red
⑮ CD player power cord

Plug the power cord into the household electrical outlet only after all the connections have been completed.

Proceed as follows with the set up and connections.

1. **Place the cassette deck receiver on top of the CD player.**
2. **Connect the CD player OUTPUT jacks to the cassette deck receiver CD INPUT jacks with audio cords. And connect the CD player's power cord to the cassette deck receiver's AC OUTLET.**
   If using this unit together with the optional CD player PD-Z65, PD-Z75T, PD-Z74T or PD-Z85M, connect the control cord ⑤. The CD player flat cable is not used when setting up this system.
3. **Connect the FM antenna ① and the AM loop antenna ② to the cassette deck receiver's antenna terminals.**
4. **Place the turntable on top of the cassette deck receiver.**
5. **Connect the turntable connection cords ⑦ to the cassette deck receiver's jacks.**
   If using the turntable PL-Z85, connect the turntable's audio cords and power supply cord respectively to the cassette deck receiver's PHONO jacks and DC 12 V OUTPUT jack.
   If using a different turntable, connect its audio cord and ground cord.

NOTE:

- *Insert the plugs securely into the jacks. Improper connection can lead to sound distortion or malfunction.*
- *The white plug is for the left channel connection and the red plug for the right channel connection.*

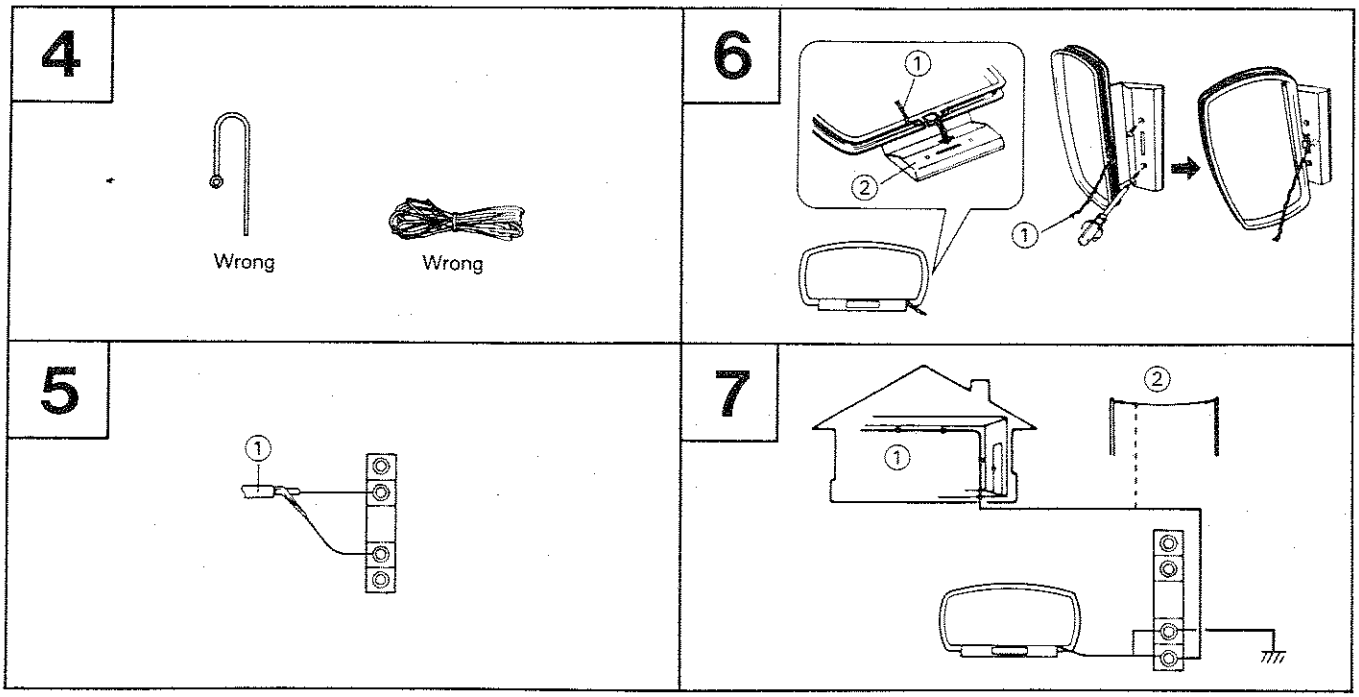
6. **Connect the speaker cords ⑧ to SPEAKERS jacks. (Fig. [2])**
   Use only the S-Z35D speaker system. Be sure to connect the speaker cords to the allocated speaker jacks on the cassette deck receiver.

Surround speaker connection (Fig. [3])

Preferably, only use S-P70 (sold separately). If other manufacturer's speakers are used, be sure they have an impedance rating of 16 Ω or more.

7. **Finally, connect the power cord ⑩ to the AC wall socket.**

ANTENNA CONNECTIONS



Radio reception is not possible unless the antenna is properly connected.

The strength of broadcast signals varies from one area to another. Signal propagation is especially poor in metropolitan areas, where there are many tall buildings, and in mountainous areas. Proper antenna installation is vital to good reception.

FM ANTENNA

FM Antenna Attachment (Fig. 4)

Connect the accessory FM antenna to the FM terminals. Extend the antenna out to its full length, and affix it to a wall, etc.

External FM antenna installation (Fig. 5)

Use an external antenna when the signals from the station are weak and cannot be picked up by the accessory FM antenna, or when the sound heard is accompanied by large amounts of noise.

① 75 Ω coaxial cable

AM ANTENNA

The AM loop antenna supplied with the tuner should be connected to the AM antenna terminals. The antenna should be placed at a distance from the tuner, and should not be allowed to touch metallic objects. Avoid placing it near CD players, personal computers, television sets, and other devices generating radio frequencies.

Setting Up the AM Antenna (Fig. 6)

- Insert the clip on the bottom of the antenna into the groove on the leg.
- To permanently fix the antenna, screw the leg to a wall or something similar before assembling (fixing the antenna in the direction that gives the best reception).
- Place the antenna on a level surface and rotate it to locate the orientation that yields the best reception.

① lead wire ② leg

External AM antenna (Fig. 7)

① **Indoor AM antenna**

Provide a vinyl-coated wire (5 to 6 meters long). Secure one end to the AM terminal and the other end to a wall or other high location.

② **Outdoor AM antenna**

If reception is still poor even when a lead antenna has been fully extended indoors, stretch out a vinyl-coated wire and secure it outdoors.

NOTE:

Do not detach the AM loop antenna when using the external AM antenna.

ANTENNA GROUND

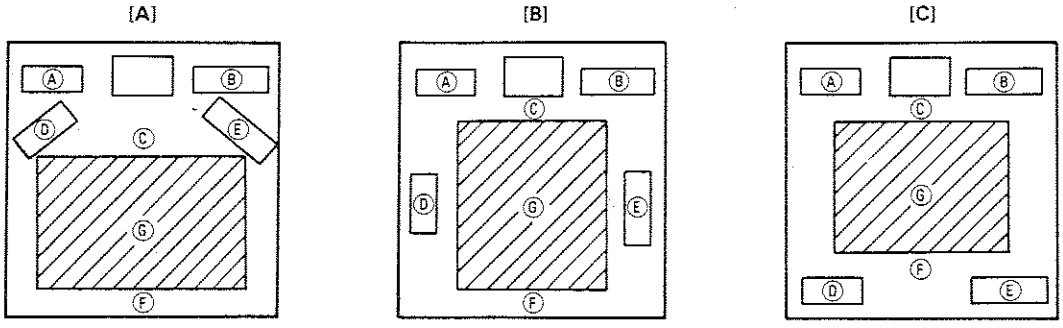
Although grounding is not necessary for reception, it is recommended for protection against damage from lightning for an outdoor FM antenna. Grounding is recommended as well to help to reduce noise and hum.

NOTE:

Never make the ground connection to a gas pipe as sparks could cause the gas to ignite.

SURROUND SYSTEM

8



What is surround sound?

With ordinary stereo, sound normally comes only from speakers in front of the listener. In a concert hall or theater though, sound reflected from the walls and ceiling reaches the listener from all directions. This is what accounts for the feeling of ambience or spaciousness of a live performance.
Surround sound works to reproduce these effects to produce fuller, more "live" sound.

STEREO WIDE

When the surround speakers are not connected, the stereo wide function may be activated. This function enhances the stereo effect. Note however, that it does not operate in the case of a monaural source.

Speaker System Placement Examples (Fig. 8)

The sound effects obtained in a surround system depend on speaker placement. Experiment with various arrangements to find the one most suited to your tastes.
Placing the speakers slightly higher than ear level contributes to sound quality.

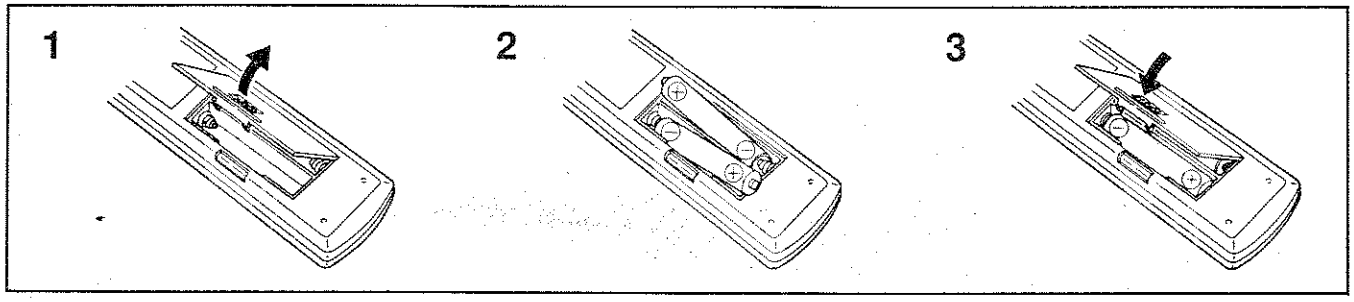
[Case A]
Good sound dispersion; recommended for movies, etc.

[Case B]
Sound appears to come from directly in front of listener. Good for listening to music recordings.

[Case C]
Offers most varied effects; good for watching sports programs or listening to live recordings.

Ⓐ Front speaker left
Ⓑ Front speaker right
Ⓒ Front
Ⓓ Surround speaker left
Ⓔ Surround speaker right
Ⓕ Rear
Ⓖ Listening area

LOADING BATTERIES INTO REMOTE CONTROL UNIT



1. Open the rear cover.
2. Install size "AAA" (IEC R03/UM-4) batteries, correctly matching polarity.
3. Close the cover.

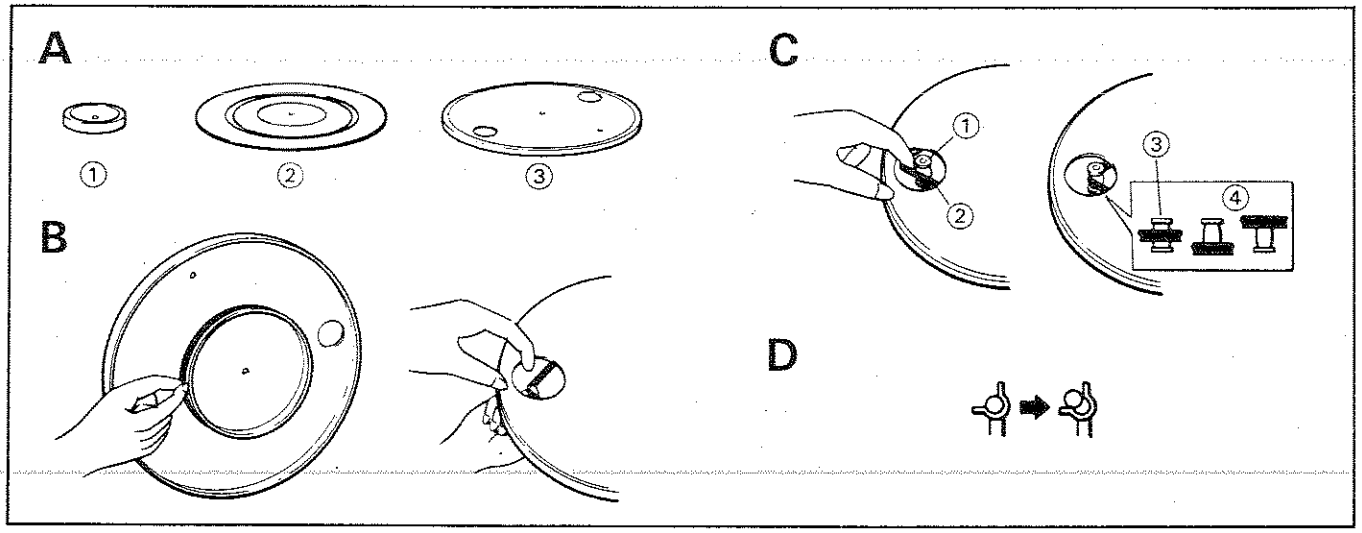
Incorrect use of batteries may lead to leakage or rupture. Always be sure to follow these guidelines:

A:
Always insert batteries into the battery compartment, correctly matching the positive + and negative – polarities, as indicated inside the compartment.

B:
Never mix new and used batteries.

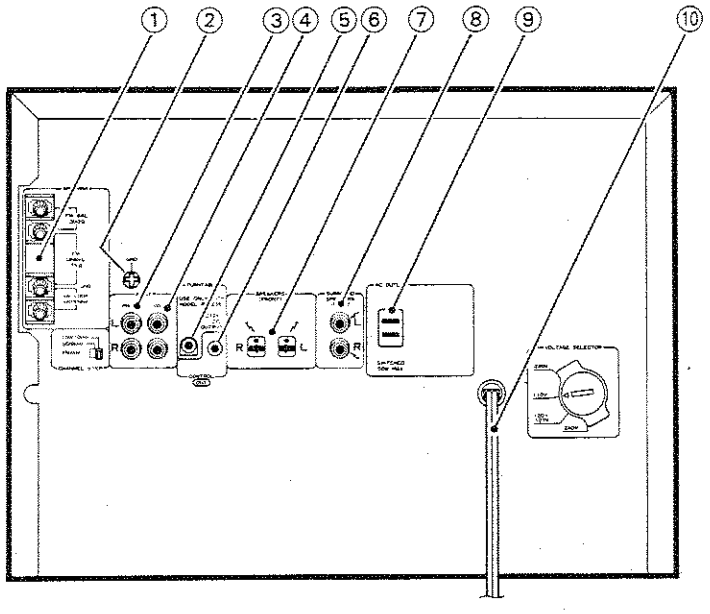
C:
Batteries of the same size may have different voltages, depending on their type. Do not mix different types of batteries.

PL-Z85 TURNTABLE SET UP



1. **Check the parts (See diagram A).**
   ① EP adaptor (You will find this taped on the cabinet.)
   ② Platter mat
   ③ Platter
2. **Pinch belt on inner rim between thumb and forefinger (See diagram B).**
3. **Slip belt over finger and pull out, inserting finger in hole.**
4. **Insert finger from top of platter and transfer belt to forefinger.**
5. **Lower platter onto spindle.**
6. **Release belt onto pulley (See diagram C).**
   ① Pulley
   ② Belt
   ③ Correct
   ④ Incorrect
7. **Place platter mat on platter (with "PIONEER" side up).**
8. **Remove the vinyl band holding the tonearm.**
9. **Remove the stylus cover.**
10. **Remove the tonearm from the arm rest (See diagram D).**

PANEL FACILITIES



* Illustration shows multi-voltage model.

REAR PANEL FACILITIES

Cassette deck receiver: RX-Z15/RX-Z35/RX-Z45

① FM/AM ANTENNA terminals

Antennas must be connected to these terminals: otherwise you will not be able to receive stations. See page 6 for details on ANTENNA CONNECTIONS.

② Ground terminal (GND)

Connect this to the ground terminal on the turntable (except for PL-Z85).

③ PHONO input jacks

Connect the audio cord of the turntable to these jacks.

④ CD input jacks

Connect to output jacks of a CD player.

⑤ TURNTABLE (DC 12 V OUTPUT) jack

This jack supplies power to the turntable PL-Z85.
Connect the power supply cord of the turntable to this jack.

For U.S. model:
In the U.S.A., model PL-Z85 is not sold, so do not use this jack. If you are using a turntable, be sure that it is a PIONEER model.

⑥ CONTROL OUT jack

Connect to a compact disc player PD-Z65, PD-Z75T, PD-Z74T or PD-Z85M CONTROL jack.

For U.S. model:
In the U.S.A., only the PD-Z85M can be connected.

⑦ SPEAKERS jacks

Connect exclusive S-Z35D speakers to these jacks.
L: Connect the left speaker system as seen from the listening position.
R: Connect the right speaker system as seen from the listening position.

⑧ SURROUND SPEAKERS jacks

Connect the surround speaker systems.

NOTE:
Connect a speaker system having a nominal impedance of 16 Ω or more.

⑨ AC OUTLET (SWITCHED 50 W MAX)

Power supplied through this outlet is turned on and off by the cassette deck receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 50 W.

[U.S. and Canadian models] AC OUTLET (SWITCHED 50 W (0.4 A) MAX)

Power supplied through this outlet is turned on and off by the cassette deck receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 50 W (0.4 A).

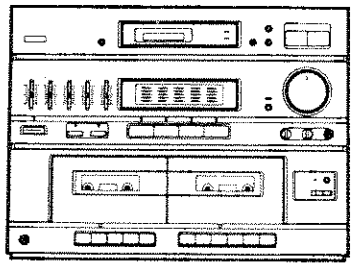
NOTE:
Do not connect appliances with high power consumption such as heaters, irons, or television sets to the AC OUTLET in order to avoid overheating or fire hazard.
This can cause the cassette deck receiver to malfunction.

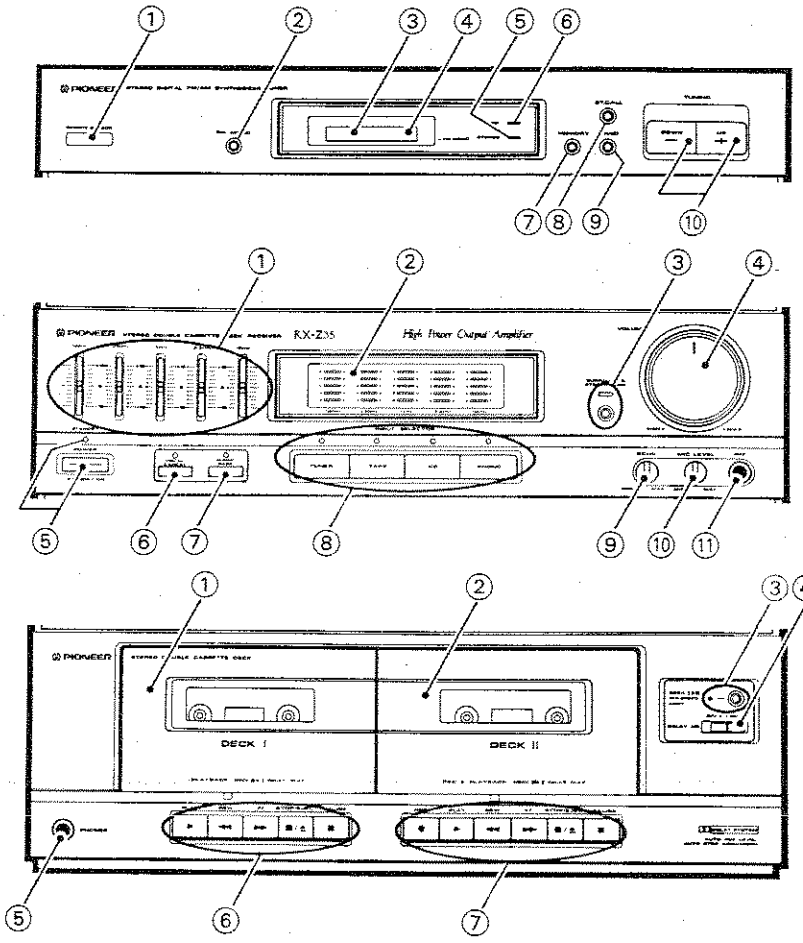
⑩ Power cord

Connect this to the household electrical outlet.

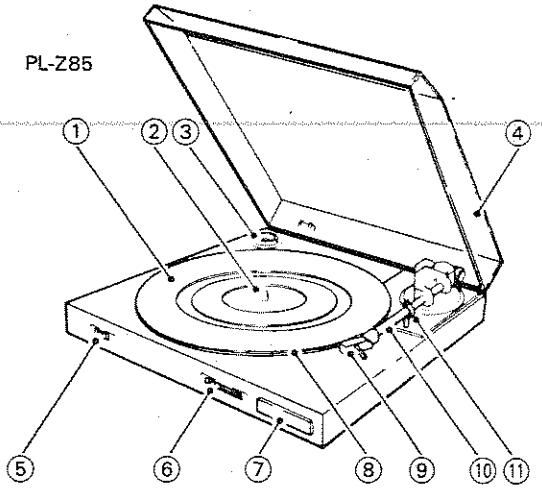
PANEL FACILITIES

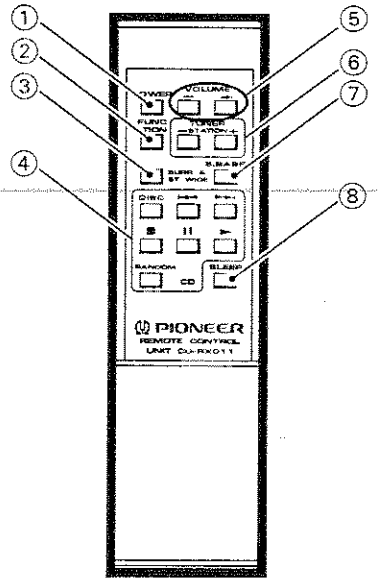
RX-Z35





PL-Z85





FRONT PANEL FACILITIES

Cassette deck receiver RX-Z15/RX-Z35/RX-Z45

• Illustration shows model RX-Z35.

[Tuner Section]

① Remote sensor window (REMOTE SENSOR)

② FM MONO button

Turn on when there is much noise during reception of FM stereo broadcasts. The reproduced sound will become monaural but noise will be reduced.

③ Display section

Shows received broadcast frequency or station call no.
FM and MHz light: FM reception.
AM and kHz light: AM reception.
Ch display: station call no. display

④ FM MONO indicator

Lights when the FM MONO button is set to ON. When this indicator is lit, FM stereo broadcasts are reproduced monaurally.

⑤ STEREO indicator

Lights when an FM stereo broadcast is received (FM MONO button set to OFF).

⑥ TUNED indicator

Lights when a broadcast is received and tuned in well.

⑦ MEMORY button

Used for memorizing stations (see page 16).

⑧ ST. (Station) CALL button

Use to switch between frequency display and station no. display.
During frequency display, you can use the + and – buttons ⑩ to raise or lower the received frequency.
During station no. display, you can use the + and – buttons ⑩ to raise or lower the received station number.

⑨ BAND selector button

Each time this button is pressed, FM or AM reception is selected alternately.

⑩ +, – (UP, DOWN) buttons

Used for locating stations.
Use "–" button for lower, and "+" button for higher station no. or frequencies.

[Amplifier and Graphic Equalizer Section]

① Graphic equalizer controls

② Spectrum analyzer display (RX-Z35, RX-Z45) Level indicator (RX-Z15)

③ SURROUND & STEREO WIDE button/indicator

By turning this switch ON, you can enjoy surround reproduction when rear speakers are used.
By turning this switch ON, you can enjoy STEREO WIDE reproduction with greater left-right spread when rear speakers are not used.
The indicator lights when SURROUND & STEREO WIDE is on.

NOTE:
In the case of monaural source, SURROUND & STEREO WIDE effects cannot be obtained.

④ VOLUME control

⑤ POWER STANDBY/ON switch /STANDBY indicator

This is the switch for electric power.

ON : When set to the ON position, power is supplied and the unit becomes operational.

STANDBY : When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.
The unit is in STANDBY when only the STANDBY indicator above the POWER switch is lit.
Press the SLEEP button on the remote control to operate the sleep timer, and the STANDBY indicator flashes to show that the sleep timer is operating.

⑥ VOCAL CANCEL button/indicator (RX-Z15, RX-Z35)

When set to ON, the sound volume of vocal sound is lowered.

⑦ SUPER BASS button/indicator (RX-Z35 only)

Set to ON to augment bass frequency response.

⑧ INPUT SELECTOR buttons

[TUNER]
Press to listen to radio broadcast.
[TAPE]
Press to listen to cassette tape.
[CD]
Press to listen to a CD player connected to the CD jacks.
[PHONO]
Press to play records on a turntable connected to the PHONO jacks.

⑨ ECHO control (RX-Z35 only)

Use to control the echo level of the microphone connected to the MIC jack.

⑩ MIC LEVEL control (RX-Z15, RX-Z35)

Used for adjusting the volume of the microphone.

⑪ MIC (Microphone) jack (RX-Z15, RX-Z35)

This is a standard jack for connecting a microphone.

[Cassette Deck Section]

- Use TYPE I (normal) tape.
- Tapes can be played back on Deck I; tapes can be played back and recorded on Deck II.

① Deck I cassette door

② Deck II cassette door

③ HI-SPEED COPY button/indicator (RX-Z35, RX-Z45, and RX-Z15 U.S. and Canadian models)

Used for high-speed tape copying. Copying at about twice normal tape speed.

④ DOLBY* NR switch (RX-Z35, RX-Z45, and RX-Z15 U.S. and Canadian models)

Set this switch to the ON position to activate the DOLBY NR system.

- Tapes recorded using Dolby noise reduction should always be played back with the noise reduction system on. Sound quality will be adversely affected if played back with the system off, or if tapes recorded using a different noise reduction system are played back with the Dolby NR system on.
- It is recommended that tapes recorded with Dolby B type NR be so marked on the label. This will help prevent incorrect setting of the noise reduction switch during playback.

*

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.

⑤ PHONES (Headphones) jack

For stereo headphones.

NOTE:
There is no output from the speakers when headphones are plugged into PHONES jack.

⑥ Deck I operation buttons

► (PLAY)..... For playing back a tape.
►► (F.F.)..... Fast forward.
◄◄ (REW)..... Rewind.
■/⏏ (STOP/EJECT).... Press to stop playback. Pressing when the deck has stopped playing opens the cassette door.
II (PAUSE)..... Temporarily stops tape travel. Cancels pause mode when pressed again.

⑦ Deck II operation buttons

● (REC)..... Press this button, and the ► button is simultaneously pressed for you to start recording.
► (PLAY)..... For playing back a tape
►► (F.F.)..... Fast forward
◄◄ (REW)..... Rewind
■/⏏ (STOP/EJECT).... Press to stop recording or playback, and to eject the cassette tape.
II (PAUSE)..... Press to pause during playback or recording. To cancel the pause mode, press again.

Turntable: PL-Z85

① Platter mat

② Platter spindle

③ EP adaptor

Place over the spindle to play 45-rpm singles.

④ Dust cover

⑤ SPEED switch

Set this switch in accordance with the speed of the record.
33: For 33-1/3 rpm records.
45: For 45 rpm records.

⑥ ARM-ELEVATION switch

- To suspend record play temporarily.
- For changing the tracks during actual play.

[UP]: The tonearm rises (the stylus moves away from the record.)
[DOWN]: The tonearm descends (the stylus is lowered onto the record.)

⑦ STOP (■) button

Press this button when stopping play.

⑧ Platter

⑨ Cartridge

⑩ Tonearm

⑪ Armrest

Remote control unit

① POWER button

② FUNCTION button

Each time you press this button, the input selector changes.

③ SURR. & ST WIDE button

Turns SURROUND & STEREO WIDE on and off.

④ CD operation buttons

Perform the connections so that the CD player is operated by the remote control unit.

► ..... Play
|◄◄, ►►|... Track search
■ ..... Stop
II ..... Pause
DISC..... Use to select discs on the twin-tray CD player (PD-Z75T) and the Multi-play CD player (PD-Z85M).
RANDOM ... Press when you want to enjoy random play on the CD player.

⑤ VOLUME + (UP) and – (DOWN) buttons

When pressed, VOLUME on the receiver is actually moved by a motor.

⑥ TUNER STATION + and – buttons

• Before operation, memorize broadcast stations.
+ ... Stations change in order in the upward direction
– ... Stations change in order in the downward direction.

⑦ S.BASS button (RX-Z35 only)

Switches S.BASS (SUPER BASS) ON and OFF.

⑧ SLEEP button

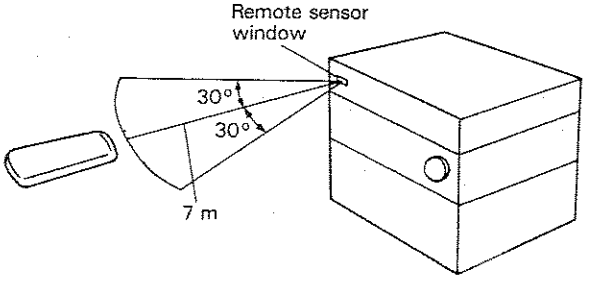
Sets the sleep timer. Press this button to set the 60 minute sleep timer.

The receiver input selector automatically switches to the music source being operated when you press the CD playback (►), cassette deck playback (►), or tuner station controls.

NOTE:

It is not possible to operate the CD player with the remote control unless the control cord is connected.

Range of remote control



When the remote control unit is pointed at the remote sensor window on the tuner section and any of its buttons is pressed, the tuner and other components can be operated by remote control.
Distance: Within a range of approx. 7 meters (23 feet) from the remote sensor window.
Angle: Within approx. 30 degrees from the center of the remote sensor window.
Remote control will not be possible if there is an obstacle between the remote control unit itself and the remote sensor window.
Performance of the remote control unit is adversely affected in the presence of strong fluorescent light. Keep such lights away, especially from the sensor window.

HOW TO HANDLE CASSETTE TAPES

Bear in mind the following points before loading cassette tapes.

Is the tape loose, or is some of the tape outside the cassette?
If some of the tape is projecting outside the cassette shell or if it is loose, it may not feed between the capstan and pinch roller. This will prevent the tape from being transported or damage the tape itself. In cases like these, insert a pencil into the reel hole and take up the slack (Fig. A). Some cassette tapes come with a plastic or thick paper stopper which prevents tape slack. Remove this stopper when loading the tape and replace it after having used the cassette.

What are the accidental erasure prevention tabs for?
A cassette is provided with these tabs so that important recordings will not be erased accidentally. When the tab (Fig. B) on the cassette shell is broken out with the tip of a screwdriver, it will not be possible to activate the recording function even by pressing the recording (REC) button, so valuable recordings will not be erased in error.
To re-record on a cassette whose tabs have been broken out, simply stick a piece of doubled adhesive tape over the tab areas, as shown in Fig. C.

NOTE:
The accidental erasure prevention tabs are located at the top left on both sides A and B (1 and 2), so that material on each side can be prevented from being erased in error.

Tips on using cassette tapes
- Leader tape (which does not allow sound to be recorded over it) is provided at the beginning of a cassette tape. Start recording after allowing the tape to run for approx. 5 seconds so that the leader tape clears the recording head.
- Do not leave a cassette tape exposed to the environment. Store the cassette in its case so that dust and dirt do not adhere to the tape after use, and so that the tape is prevented from becoming slack. Choose a location which is not exposed to the effects of magnetism, dust, dirt and oil for storing the tapes.
- Because C-120 tapes are so thin, they easily jam in the pinch roller and capstan, and they are susceptible to other trouble such as irregular winding. Try not to use them with this unit.
  Use tapes of 90 minutes or less.

Fig. A

How to take up tape slack.

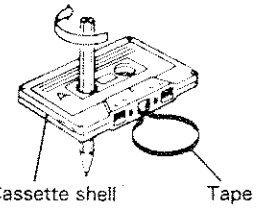


Fig. B

How to prevent already recorded tapes from being erased.

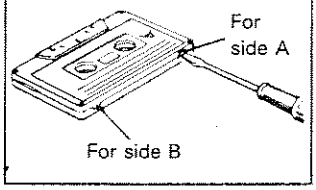
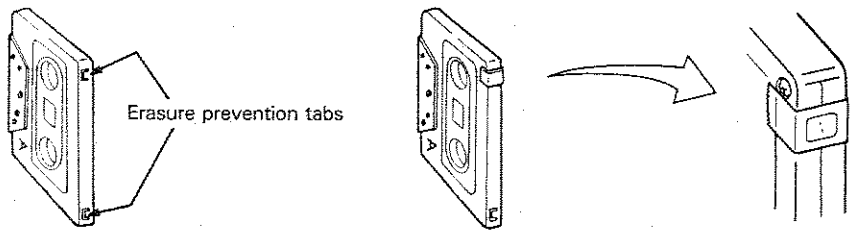


Fig. C

When you want to record again on a cassette with broken erasure prevention tabs, cover the tab sections with a double layer of cellotape or other tape.



BASIC OPERATIONS

PREPARATION

Press POWER switch of the cassette deck receiver.
Select an INPUT SELECTOR button.

Auto Function

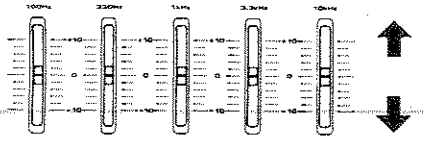
This model is equipped with "auto function" operation, so when the switch for playing cassette deck or tuner is pressed, the receiver's function switches automatically.
Use the INPUT SELECTOR buttons for CD and PHONO selection since Auto Function is not effective for this. With a compact disc player, if you press the ► button or the RANDOM button on the remote control, the Auto Function operates, and the input selector switches to CD.

NOTE:
Input selectors can not be switched during recording. (Auto function does not operate either.) Switching between input selectors is possible during HI-SPEED copy.

Graphic Equalizer Controls

The advantage of the GRAPHIC EQUALIZER over conventional tone controls is that the five controls of the GRAPHIC EQUALIZER make it possible to control five different narrow, distinct sections of the audio band. With conventional tone controls a setting for a bass or treble boost or cut will also affect the lower or upper mid frequencies. The frequency bands controlled by the five slide controls have been chosen to yield the maximum possible control action within the audio spectrum.

100 Hz : The 100 Hz control is very useful for enhancing low bass notes as in organ music.
330 Hz : The 330 Hz control will allow you to vary the upper bass frequencies.
1 kHz : The 1 kHz control is the presence control and can be used very effectively to emphasize, or de-emphasize vocalists.
3.3 kHz : The 3.3 kHz control will add brilliance and clarity to brass instruments and violins.
10 kHz : The 10 kHz control can be used to make up for missing high frequencies absorbed by the environment and to add a natural crispness to music.



Emphasize frequency range.

De-emphasize frequency range.

TUNING INTO STATIONS
(Tuner section operation)

1. Select the desired broadcasting band using BAND selector button.
2. Press "+" or "–" tuning button for higher or lower frequencies.

[Auto tuning]
Press "–" or "+" button until the frequency starts to change, then release it.
The tuner will automatically search for a broadcasting station, and stop when one is found, and the TUNED indicator lights up. To search for another station, press again.
• To interrupt auto tuning, press "–" or "+" button again.

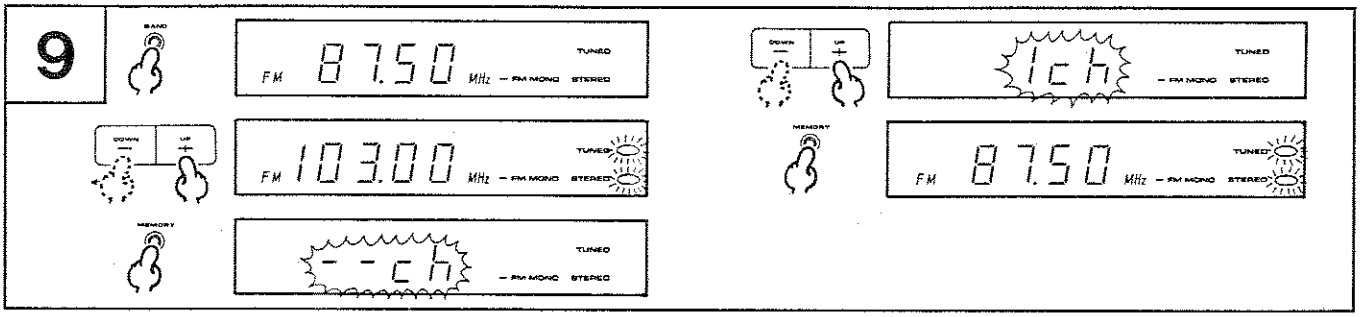
NOTE:
When auto tuning is in use, reception may not be possible for distant stations or when signals are weak. At these times manual tuning is recommended.

[Manual tuning]
Press "–" or "+" button and release quickly.
The tuning frequency will change by one step each time the button is pressed. Press as many times as necessary to tune in the desired station.
The TUNED indicator lights up when the station is tuned in best.
• If you keep the "–" or "+" button depressed after the frequency has begun to change, the reception frequency changes continuously, and stops when the button is released.

3. Adjust VOLUME control on the receiver.

FM stereo/monaural broadcast reception

When the FM MONO button is in the off position (FM MONO indicator is out), the STEREO indicator lights during reception of an FM stereo broadcast.
If the FM stereo broadcast signal is weak, with a lot of noise, press the FM MONO button and the FM MONO indicator lights. Reception will be monaural, but noise will be reduced.



MEMORIZING STATIONS (Tuner section operation)

(See Fig. 9)

Presetting

Up to 24 FM/AM stations can be memorized at random.
It is also possible to memorize the FM MONO mode ON/OFF setting for FM broadcasts.

1. **Select the desired band with the BAND selector button.**
2. **Tune into the broadcast station you want to memorize.**
3. **Press the MEMORY button within five seconds.**
4. **Select the channel (station call no.) you want to memorize with the + (UP) or – (DOWN) button.**
5. **Press the MEMORY button within five seconds.**
   - During memory operation, the channel and frequency display flash.

RECEPTION USING PRESET TUNING

1. **Switch to the station mode with the ST. CALL button.**
2. **During channel indication display (2 to 3 seconds), select the desired channel with the + (UP) or – (DOWN) button.**

The remote control unit's TUNER STATION + or – buttons can be used in the same way. At this time, there is no need to press the ST. CALL button.

Channel memory

The preset station memory will retain its contents even when the power switch is turned off or the power cord disconnected, so long as the power cord is not left disconnected for more than a few days.

Last station memory

The last received AM and FM stations remain stored despite INPUT SELECTOR and/or POWER switching. To recall, use BAND selector button.

TAPE PLAY (Cassette deck operation)

Tapes may be played back in Deck I or Deck II.
While a tape is playing back, make sure the other deck is not playing. If you press both the ► (PLAY) button on both Deck I and Deck II, playback sound is from Deck II.

1. **Press ■/≙ (STOP/EJECT) button, and load a recorded tape.**
2. **Set the DOLBY NR switch to the same position used for recording (RX-Z35, RX-Z45, and RX-Z15 U.S. and Canadian models).**
3. **Press ► (PLAY) button.**
4. **Adjust VOLUME control on the receiver.**
5. **To stop playback, press ■/≙ (STOP/EJECT) button.**

During operation of one of the decks, do not operate the other deck, except during relay play operation.

Auto Stop Mechanism

- The mechanism stops automatically when the end of tape is reached.

Relay playback

Relay playback from Deck II to Deck I is possible.

1. **Start playback on Deck II.**
2. **Press the II (PAUSE) button on Deck I.**
3. **Press the ► (PLAY) button on Deck I.**

When Deck II finishes playing, Deck I automatically starts playing. Relay play from Deck I to Deck II is not possible.

RECORDING ONTO A CASSETTE TAPE (Cassette deck operation)

Material can be recorded on Deck II only. Recording is not possible on Deck I.
On models with a HI-SPEED COPY button, recording of a source other than a tape is not possible when the HI-SPEED indicator is lit. Press the HI-SPEED button to switch the indicator off.
The graphic equalizer does not operate during recording.

1. **Press ■/≙ (STOP/EJECT) button, and load the tape for recording into Deck II.**
   - Check to see that the accidental erasure prevention tabs are not broken off.
   - Make sure that there is no tape slack.
2. **Set DOLBY NR switch to the desired position (RX-Z35, RX-Z45, and RX-Z15 U.S. and Canadian models).**
   - A tape which has been recorded using the DOLBY NR system must be played back with the same system.
3. **Use the INPUT SELECTOR button on the receiver to select the recording source.**

Program source	Selected indicator	Operation
Radio broadcast	TUNER	Tune into a broadcast
Tape	TAPE	Play a tape in Deck I
Compact disc	CD	Play a compact disc
Record	PHONO	Operate the turntable

4. **Press the ● (REC) button.**
   - Recording begins.

5. Play the recording source.
6. To stop recording, press ■/≜ (STOP/EJECT) button.

Do not operate Deck I when recording on Deck II.

NOTE:
If beat noise is recorded during reception of an AM broadcast, place the AM loop antenna away from the cassette deck receiver.

Pausing and restarting recording

1. Press Deck II ❚❚ (PAUSE) button.
   • Recording will be suspended.
2. To restart recording again, press ❚❚ (PAUSE) button.

DOLBY NR SYSTEM (RX-Z35, RX-Z45, and RX-Z15 U.S. and Canadian models)

The Dolby NR Systems are designed to reduce high-frequency tape hiss noise generated during playback.
The level of low-volume, high-frequency sounds is increased during recording, and decreased by the same amount during playback to restore the original level. At the same time, high-frequency noise (the most easily perceived by the human ear) is attenuated.
Dolby B-type NR system reduces high-frequency tape noise, widening the dynamic range.

NOTE:
Avoid playing back tapes reduced using the Dolby NR system with DOLBY NR switch in the OFF position, or tapes recorded without Dolby NR system with DOLBY NR switch in the ON position, since this does not allow faithful reproduction of the original sound.

RECORD PLAY (Turntable PL-Z85)

1. Set INPUT SELECTOR button on the receiver to PHONO.
2. Place record on the platter mat.
3. Remove the stylus cover and release the tonearm from the arm rest.
4. Set SPEED switch.
5. Set ARM-ELEVATION switch to UP position.
6. Move the tonearm by hand to the desired position over the record.
7. Set ARM-ELEVATION switch to DOWN position.
   • The tonearm descends onto the record and playback starts.
8. Adjust the volume with VOLUME control on the receiver.
9. To stop the player while a record is being played, press STOP button.

MICROPHONE MIXING (RX-Z15, RX-Z35)

Mixing involves combining the signals from two input sources (a microphone and a tape, for example).

MIXING PROCEDURE

1. Plug a microphone into MIC jack.
2. Adjust VOLUME to a suitable level.
3. Set MIC LEVEL control to the center position between MIN and MAX.
   • If howling occurs (a high-pitched sound from the speakers), take the following steps.
   1. Move the microphone away from the speakers.
   2. Lower the volume.
4. Select the desired program source using INPUT SELECTOR buttons.
5. Start playback of the program source.
6. Adjust VOLUME control.
7. Use MIC LEVEL control to adjust the microphone level in relation to the music source.
8. Talk or sing into the microphone.

[RX-Z35 only]

9. Adjust the microphone echo level with ECHO control.

MIXING RECORDING

You can use the mixing feature to record input from a microphone and another source together.
Switching on the VOCAL CANCEL function also enables mic mixing recording.

1. Perform steps 1 to 7 in the section "MIXING PROCEDURE."
2. Load a tape for recording into Deck II.
3. Press the ● (REC) button.
4. Sing along with the program source.

NOTE:
When microphone mixing while playing back on Deck I, mixing recording is not possible on Deck II.

HIGH-SPEED TAPE COPYING (RX-Z35, RX-Z45, and RX-Z15 U.S. and Canadian models)

Duplicating the recorded contents of one tape onto another tape is known as tape copying. The contents of the tape in Deck I can be copied onto the tape in Deck II (but not vice versa.) Copying is not possible while either Deck is operating.

If a tape recorded with the DOLBY NR system is copied, the copied tape will also be recorded automatically with DOLBY NR system. If a tape recorded without the DOLBY NR system is copied, the copied tape will also be recorded automatically without the DOLBY NR system.

1. **Load the recorded tape into Deck I and the tape for recording into Deck II.**
   - Wind the tape forward past the leader to the start of the magnetic coating portion.
   - Make sure there is no tape slack.

Even if INPUT SELECTOR button is set to another position, high-speed tape copying will still proceed. The sound of the program source selected by INPUT SELECTOR button will be heard through the speakers.

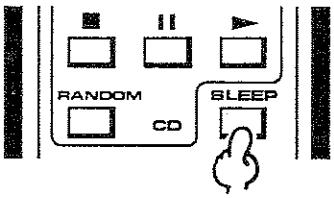
2. **Press HI-SPEED COPY button.**
   - The HI-SPEED COPY indicator lights.
3. **Press the ⏸ (PAUSE) button on Deck I, and then press the ► (PLAY) button.**
4. **Press the ● (REC) button on Deck II.**
   - Tape copying at about twice normal speed.
5. **Press ■/⏏ (STOP/EJECT) button on both decks to stop the copying at any time.**

NOTE:

- *If you are using a TV in the vicinity of the unit, noise will be recorded. Either switch off the TV or move it away from the unit.*
- *There is variation in actual tape length even among cassettes of the same length label (C-60, C-90, etc.). Therefore, even if the recording tape is labeled as the same length as the playback tape, it is possible for the recording tape to end first without recording all of the contents of the playback tape.*
- *When the HI-SPEED indicator is lit, the deck is in the tape copy mode, so recording from other sources is not possible.*

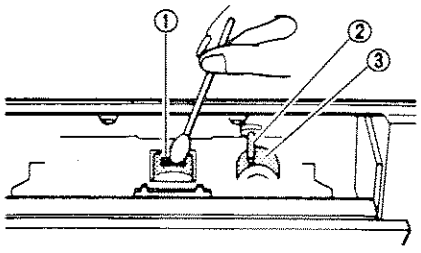
SLEEP TIMER —Automatically turns off power.

The sleep timer can be operated by remote control only. Power is automatically switched off after 60 minutes.
During sleep timer operation, the STANDBY indicator flashes.



MAINTENANCE

10



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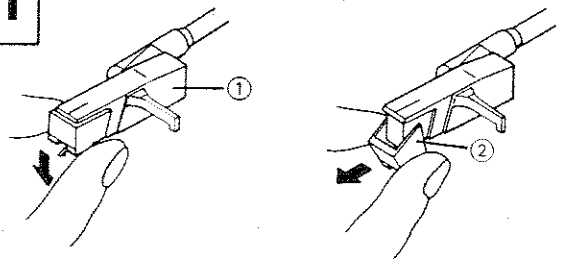

CLEANING THE HEAD SECTION

See Fig. 10.

① Head ② Capstan ③ Pinch roller

The heads, capstan and pinch roller are parts which are liable to get dirty quite easily. In particular, if the heads are dirty, the high frequency components of the sound will not be reproduced and the stereo balance will be impaired, resulting in a deterioration of sound quality. It is therefore recommended that the head section be cleaned regularly.

- Press EJECT button to open the cassette door.
- Dip a cleaning swab into head cleaning fluid and use it to wipe the head, capstan, and pinch rollers. Wait 2—3 minutes till cleaning fluid dries.

DEMAGNETIZING THE HEAD

The recording/playback head becomes magnetized when you use the cassette deck for prolonged periods of time. This results in noise being generated and the treble dropping off during recording and playback. The recording/playback head should therefore be demagnetized regularly with a commonly sold head demagnetizer.

When demagnetizing the head, switch power ON to the cassette deck receiver.

To avoid adversely affecting the amp and speakers, be sure to set the volume level to MIN. Also disconnect the headphone plug from the PHONES jack.

For further details, refer to the operating instructions accompanying your head demagnetizer.

NOTE:

Do not hold a screwdriver, metal objects or magnets close to the heads.

MAINTENANCE OF EXTERNAL SURFACES

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are very dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzine, insecticide sprays and other chemicals on or near this unit, since these will corrode the surfaces.

REPLACING THE STYLUS (PL-Z85)

1. **Remove the stylus gently. (See Fig. 11.)**
2. **Attach the new stylus to the cartridge.**

① Cartridge ② Stylus

NOTE:

- *The service life of the stylus on the supplied cartridge ranges from 800 to 1,000 hours. (After about one year if you play records about two hours everyday. However, the stylus may need to be replaced earlier depending on the way it is used.)*
- *Using a worn or damaged stylus can damage your records and distort the sound reproduction. Remember to replace the stylus at the earliest possible date.*
- *Always use the PIONEER "PN-210" as a replacement stylus.*
- *Always ask for a genuine PIONEER replacement stylus.*

TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used.
If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Cassette deck, amplifier section

Symptom	Cause	Remedy
Power switch is on but power does not turn on.	• AC cord is unplugged.	• Plug power cord into wall socket.
No sound from speakers.	• Volume is turned all the way down. • Speaker cords are disconnected. • INPUT SELECTOR is not set to your desired listening source. • Connection cords are not connected or are damaged.	• Raise volume knob setting. • Connect speaker cords correctly. • Select correct INPUT SELECTOR. • Connect correctly or replace with good quality cords.
Sound from only one speaker.	• One of the speaker cords is disconnected or damaged.	• Connect correctly.
Screeching or howling sound heard during mic mixing.	• Microphone angle is bad. • Microphone is too close to speaker. • Volume is too loud.	• Change microphone angle. • Move microphone further away from speakers. • Reduce volume.
Tape does not move.	• Deck is in pause mode. • Cassette inserted incorrectly.	• Press ⏸ (PAUSE) button. • Put cassette properly in holder.
No sound heard from tape.	• INPUT SELECTOR not set to TAPE. • Playing unrecorded tape.	• Set to TAPE. • Play a recorded tape.
Tape sounds unclear, not loud enough.	• **Dirty head.**	• **Clean head.**
Can not record.	• Erasure prevention tabs are broken off. • **Dirty head.**	• Apply adhesive tape over tab holes. • **Clean head.**
High-speed tape copy is not possible. (RX-Z35, RX-Z45, and RX-Z15 U.S. and Canadian models)	• One deck has no tape loaded. • Tape in Deck II has erasure prevention tabs broken off.	• Load tapes in both decks. • Use cassette that can be recorded on.
Treble tones unclear.	• **Dirty head.** • DOLBY NR system is ON when listening to a tape recorded without DOLBY NR. (RX-Z35, RX-Z45, and RX-Z15 U.S. and Canadian models)	• **Clean head.** • Use same noise reduction system for playback as for recording. (Do not play tapes recorded with different NR systems.)
Treble tones too strong.	• Tape recorded with DOLBY NR but played without. (RX-Z35, RX-Z45, and RX-Z15 U.S. and Canadian models) • Tape recorded with DOLBY NR. (RX-Z15) (except for U.S. and Canadian models)	• Play in same condition as recording. (Turn on DOLBY NR switch for recorded tapes with DOLBY NR.) • Use tapes that are not DOLBY NR encoded.
Strange sounds heard (or recorded from) tape, CD, or radio.	• TV is on. • This unit is too close to TV.	• Turn off TV. • Move TV away until interference stops.

Tuner section

Symptom	Cause	Remedy
No reception.	• Antenna not connected. • Wrong radio band. • Station not tuned in. • INPUT SELECTOR not set to TUNER.	• Connect antenna correctly. • Set to desired radio band. • Tune in station. • Set to TUNER.
Beat noise heard.	• TV is on. • Loop antenna position bad.	• Turn off TV or move TV away. • Change loop antenna position.
Noise heard.	• Interference from nearby fluorescent light, hair dryer, or other electrical appliance. • Not tuned in correctly.	• Stop using device causing interference. • Use tuner controls to tune in station.
Sound is distorted.	• Antenna in poor position. • Broadcast is weak. • Interference from other electrical devices or multipath reception.	• Change antenna position. • Use external antenna. • Change antenna position.

Remote Control Unit

Remote control does not work.	• Batteries are dead or no batteries in remote control unit. • Poor angle or too great a distance from the remote sensor window. • There is an obstacle between you and the remote sensor window. • For CD player, the control cord is not connected. • A fluorescent light is shining on the remote sensor window.	• Insert new batteries. • Use within seven meters and within a 30 degree angle of the remote sensor window. • Change your position or move the obstacle. • Correctly connect the control cord. • Turn off the light.

Turntable

Platter does not turn.	• Belt is off.	• Put belt correctly on platter.
No sound.	• INPUT SELECTOR not set to PHONO.	• Set to PHONO.
Noise or scratchy sounds.	• Dust on record. • Scratch on record.	• Clean record. • Use good record.

Abnormal functioning of this unit may be caused by lightning, static electricity, or other external interference. To restore normal operation, turn the power off and then on again, or unplug the AC power cord and then plug it in again.

SPECIFICATIONS

Cassette deck receiver: RX-Z15/RX-Z35/RX-Z45

Amplifier Section

[RX-Z15 U.S. and Canadian models]

Continuously Average Power Output is 16 Watts* per channel, min., at 8 ohms from 60 Hertz to 20,000 Hertz, with no more than 0.9 % total harmonic distortion.**

** Measured pursuant to the Federal Trade Commission's Trade Regulation rules on Power Output Claims for Amplifiers.*

[RX-Z15 Australian and Multi-voltage models]
Peak Music Power Output ..... 255 W/6 Ω
[RX-Z35 Australian and Multi-voltage models]
Peak Music Power Output ..... 330 W/6 Ω
[RX-Z45]
Continuous Power Output (DIN) ..... 20 W + 20 W (1 kHz, T.H.D. 1 %, 6 Ω)
Continuous Power Output (RMS) ..... 30 W + 30 W (1 kHz, T.H.D. 10 %, 6 Ω)
Graphic equalizer frequency band ..... 100 Hz, 330 Hz, 1 kHz, 3.3 kHz, 10 kHz, ±7 dB

Cassette Deck Section

Systems ..... 4 track, 2-channel stereo
Heads ..... Recording/playback head x 1
Playback head x 1
Erasing head x 1
Motor ..... DC servo 2 speed motor x 1
Wow and Flutter ..... No more than 0.3 % (WRMS)
Fast Winding Time ..... Approximately 105 seconds (C-60 tape)
Frequency Response (−20 dB recording):
TYPE I (Normal) ..... 35 Hz to 14,000 Hz ±6 dB
Signal-to-Noise ratio
Dolby NR OFF ..... More than 50 dB
Noise Reduction Effect (only models featuring built-in Dolby NR)
Dolby B type NR ON ..... More than 10 dB (at 5 kHz)

FM Tuner Section

Frequency range ..... 87.5 MHz to 108 MHz
Usable Sensitivity ..... Mono: 14.2 dBf, IHF (1.4 μV/75 Ω)
Signal-to-Noise Ratio (IHF, 85 dBf Input) ..... Mono: 70 dB
Antenna Input ..... 75 Ω unbalanced
300 Ω balanced

AM Tuner Section

Frequency Range
With 10 kHz step ..... 530 kHz to 1,700 kHz
With 9 kHz step ..... 531 kHz to 1,602 kHz
Sensitivity (IHF, Loop antenna) ..... 385 μV/m
Antenna ..... Loop Antenna

Furnished Parts

Operating Instructions 1
Remote Control Unit 1
Dry Cell Batteries 2
FM Antenna 1
AM Loop Antenna 1

Miscellaneous

Power requirements
U.S. and Canadian models ..... AC 120 V, 60 Hz
European model ..... a.c. 220—230 Volts~, 50/60 Hz
Australian models ..... a.c. 240 Volts~, 50/60 Hz
Other destination models
..... AC 110/120—127/220/240 V (Switchable) 50/60 Hz
Power Consumption
RX-Z35/RX-Z45 ..... 200 W
RX-Z15
U.S. and Canadian models ..... 80 W
Other destination models ..... 175 W
Dimensions ..... 360 (W) x 272 (H) x 327 (D) mm
14-3/16 (W) x 10-11/16 (H) x 12-7/8 (D) in
Weight (without package) ..... 7 kg (15 lb 7 oz)

Speakers: S-Z35D

Enclosure ..... Book-shelf style, Rear bass-reflex type
Loudspeakers
Woofer ..... 16 cm
Tweeter ..... 6.5 cm
Nominal Impedance ..... 6 Ω
Frequency Range ..... 55 to 20,000 Hz
Sensitivity ..... 90 dB/W
Maximum Power ..... 40 W
Dimensions ..... 260 (W) x 452 (H) x 171 (D) mm
10-1/4 (W) x 17-13/16 (H) x 6-3/4 (D) in
Weight ..... 9.5 kg (21 lb)
(2 speakers)

Turntable: PL-Z85

Motor, Platter

Motor Type ..... DC servo motor
Drive Method ..... belt drive
Speed ..... 33-1/3, 45 RPM
Wow and Flutter ..... 0.07 % WRMS (JIS)
±0.10 % WTD Peak (DIN)
Signal-to-Noise Ratio ..... 63 dB (DIN-B)
Platter ..... 295 mm dia., aluminum die-cast

Tonearm

Type ..... Dynamic balance type, straight tonearm

Installed Cartridge

Type ..... MM Type
Stylus ..... 0.6 mil diamond
Replacement Stylus PN-210
Output voltage ..... 2.5 mV (1 kHz, 5 cm/s, Lat. peak)
Tracking Force ..... 2.0 — 3.0 g (optimum 2.5 g)
Frequency Response ..... 20 Hz to 25,000 Hz
Load Resistance ..... 47 kΩ
Cartridge Weight ..... 4 g

Other

Dimensions ..... 360 (W) x 90 (H) x 359.5 (D) mm
14-3/16 (W) x 3-9/16 (H) x 14-1/8 (D) in
Weight ..... 2.3 kg (5 lb 1 oz)

Accessories

EP Adaptor 1

** Specifications and design subject to possible modification without notice due to improvement.*
*** Measured By Audio Spectrum Analyzer.*

POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

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